

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

GEORGE LAND,

Plaintiff,

v.

ROCK EXOTICA, LLC,

Defendant.

Case No. 2:23-cv-04627-JDW

MEMORANDUM

To hold a manufacturer liable for an accident involving its product, there must be proof that it did something wrong. That something can be making a product with a hidden danger, making a product that poses an unreasonable danger, or being negligent in the manufacturing process. George Land suffered a catastrophic fall while working as an arborist, and he wants to hold liable Rock Exotica LLC, which made the device that Mr. Land used to climb trees. Unfortunately, Mr. Land does not have admissible evidence to sustain any of his claims against Rock Exotica. Much of the expert testimony he offers is inadmissible, and the remaining evidence is not enough to survive summary judgment.

I. BACKGROUND

A. The Unicender

Rock Exotica manufactures and sells the Unicender, which is a specialized tool that grips a rope for ascent or descent. The device consists of upper and lower handles

connected by pivoting clamping blocks, with a climbing rope threaded through alternative slots. An arborist using a Unicender can employ either a single or a double rope technique. For a single rope technique, the arborist anchors one end of the rope to a high point and ascends by sliding the Unicender upward. That approach transfers the climber's entire weight onto the Unicender and the single rope. For a double rope technique, the arborist loops the rope over an anchor and pulls both ends towards himself. That technique creates a two-to-one mechanical advantage by distributing the climber's load across two rope legs and reducing strain on the Unicender.



Unicender In Single Rope Technique



Unicender in Double Rope Technique

The Unicender offers two descent methods: Control Mode; and Advanced Mode. In Control Mode, the user routes the rope over the handles and boosts friction to manage descent. In Advanced Mode, the user squeezes the top handle to descend, which could produce rapid rope release leading to an uncontrollable fall.

The Unicender's manual states it is for expert use and that working at heights carries a "significant risk of injury or death that cannot be eliminated." (ECF No. 42-9 at 1.) It also states that the device "was not designed to catch a fall and must NOT be shock loaded." (*Id.* at 2.) The manual instructs climbers to "[n]ever trust a life to a single tool" and to always maintain a backup system, emphasizing that the rope should remain taut to prevent freefalls. (*Id.* at 1.) The manual also warns that the Unicender "will eventually wear out" and instructs users to inspect for wear or deformation—particularly in the clamping blocks—before each climb. (*Id.* at 2.)

B. The Fall

Mr. Land owned Above the Land Tree Service and worked as an arborist for twenty years. He had training from other tree climbers but no formal training in tree climbing or arborist certifications. On November 18, 2021, Mr. Land was removing a tree at a residential property in Philadelphia while using a Unicender. Mr. Land did not read the Unicender's instructions or warnings before using it. Mr. Land was using the double rope technique to ascend and the Advanced Mode to descend at the time of the incident.

Before finishing a final cut to a section of the tree trunk, Mr. Land detached his safety lanyard to maintain mobility because he was concerned that a section of the tree might fall toward him. After completing his cut, the top portion of the trunk fell toward Mr. Land. He depressed the Unicender's handle to descend out of the way, but the falling trunk section still struck him. He hurtled backwards and fell 40 to 50 feet. Paramedics took

Mr. Land to the hospital, where doctors diagnosed him with fractures to his spine and ribs. After the incident, the Unicender showed no bends, breaks, scuffs, or other damage. (ECF No. 41-7, "Glancey Dep.," at 182:17–19.)

C. Procedural History

On November 9, 2023, Mr. Land sued Rock Exotica in the Philadelphia Court of Common Pleas. He asserts claims for strict product liability and negligence.¹ Rock Exotica removed the case to this Court on November 22, 2023.

Mr. Land hired Dr. James Glancey, a licensed professional engineer with a Ph.D. in mechanical engineering, to analyze the Unicender. Dr. Glancey earned his doctorate from the University of California, Davis and practiced as a licensed mechanical engineer for over twenty years. He taught design and led an industry-partnership program at the University of Delaware while publishing more than 50 engineering articles. Outside academia, Dr. Glancey owns and manages Mechanical Design and Forensic Analysis LLC and worked as an engineering expert in more than 200 product-related matters. Although Dr. Glancey has consulted on mechanical-design issues in other litigation, he has never designed an arborist climbing device, never worked in the arborist industry, and does not claim human factors expertise.

¹ Mr. Land asserted a failure-to-warn claim in his Complaint, but he has withdrawn that claim. (See Tr. Of Hearing dated Feb. 19, 2025, at 6.)

To test the Unicender, Dr. Glancy devised a protocol that began with a non-destructive examination by photographing and measuring all major components before installing it in a test setup. He conducted load testing with a 195-pound dead weight, which was Mr. Land's approximate weight during the incident. To perform that test, he struck the Unicender with a mallet to create a dynamic load. The Unicender fell one foot and then hit the floor. He did not take any video of that test. He also load tested the Unicender at close to 1,300 pounds to simulate its maximum rated load. To perform that test, he placed the weight on the ground and attached the Unicender to a rope that he pulled taut (vertically). He struck the Unicender with a mallet, and it slipped one inch before regripping the rope. Dr. Glancy conducted all of his tests using a single rope technique, and he did not measure the angle or force of any of his mallet strikes. As for his alternative design theory, Dr. Glancey did not produce a design prototype or any drawings of a guard, nor did he run tests with the Unicender and a guard.

On December 20, 2024, Rock Exotica moved to exclude Dr. Glancey's testimony and for summary judgment. I held a hearing on the *Daubert* motion on February 19, 2025, during which I heard testimony from Dr. Glancey and from Rock Exotica's expert Richard Vance. At the hearing, Dr. Glancey reiterated his opinion that the best remedy to prevent falling debris from hitting the Unicender was to install a guard or barrier. He compared the guard to helmets or chisels with shields but could not identify any climbing tools with similar safety features.

Regarding the single rope setup, Dr. Glancey explained that “in hindsight [he] would have conducted these tests this way regardless of how [Mr. Land] had set up the rope in the tree.” (Tr. of Hearing at 46:10-13.) Although he testified at his deposition that he could not assume what the double rope testing setup results would be, at the hearing he stated that there was no meaningful difference between the single and double rope setups in testing how the Unicender responds to a dynamic load. I found most of Dr. Glancey’s testimony during the hearing not to be credible.

Following the hearing, Rock Exotica moved for leave to file a supplemental brief. That motion is now ripe, as are Rock Exotica’s motion to exclude Dr. Glancey and its summary judgment motion.

II. STANDARDS OF REVIEW

A. Summary Judgment

Federal Rule of Civil Procedure 56(a) permits a party to seek, and a court to enter, summary judgment “if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” FED. R. CIV. P. 56(a). In ruling on a summary judgment motion, a court must “view the facts and draw reasonable inferences ‘in the light most favorable to the party opposing the [summary judgment] motion.’” *Scott v. Harris*, 550 U.S. 372, 378 (2007) (quotation omitted). However, “[t]he non-moving party may not merely deny the allegations in the moving party’s pleadings; instead, [s]he must show where in the record there exists a genuine

dispute over a material fact.” *Doe v. Abington Friends Sch.*, 480 F.3d 252, 256 (3d Cir. 2007) (citation omitted); *see also* FED. R. CIV. P. 56(c)(1)(A)–(B). If she fails to make this showing, then the court may “consider the fact undisputed for purposes of the motion” and/or “grant summary judgment if the motion and supporting materials — including the facts considered undisputed — show that the movant is entitled to it[.]” FED. R. CIV. P. 56(e)(2), (3).

B. Motion To Exclude Expert

Federal Rule of Evidence 702 permits a witness who is “qualified by knowledge, skill, experience, training, or education” to offer opinion testimony if the proponent establishes that the testimony “will help the trier of fact to understand the evidence or to determine a fact in issue;” the “testimony is based on sufficient facts or data;” the testimony “is the product of reliable principles and methods;” and the opinion “reflects a reliable application of the principles and methods of the facts of the case.” FED. R. EVID. 702. The Rule imposes “three distinct substantive restrictions on the admission of expert testimony: qualifications, reliability, and fit.” *Elcock v. Kmart Corp.*, 233 F.3d 734, 741 (3d Cir. 2000). An expert qualifies if “knowledge, skill, experience, training, or education” supports his opinion. *Pineda v. Ford Motor Co.*, 520 F.3d 237, 244 n.10 (3d Cir. 2008). If he is qualified, Rule 702 requires that the relevant expert testimony “be supported by appropriate validation—i.e., ‘good grounds,’ based on what is known.” *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 590. The opinion must be based on “methods and

procedures of science” rather than “subjective belief or unsupported speculation.” *Id.* The factors for me to consider include peer review, testability, error rates, and acceptance in the relevant community. *Oddi v. Ford Motor Co.*, 234 F.3d 136, 156 (3d Cir. 2000). The standard for fit is whether the testimony is “sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute.” *U.S. v. Schiff*, 602 F.3d 152, 173 (3d Cir. 2010).

III. DISCUSSION

A. Strict Liability

Under Pennsylvania law, strict products liability follows the Restatement (Second) of Torts § 402A. *Tincher v. Omega Flex, Inc.*, 104 A.3d 328, 395 (Pa. 2014). In a design defect claim, the plaintiff must show that (a) the product was defective; (b) the defect proximately caused the plaintiff’s injury; and (c) the defect existed at the time the product left the defendant’s control. *See Pavlik v. Lane Ltd./Tobacco Exp. Int’l*, 135 F.3d 876, 881 (3d Cir. 1998). To prove that a product was defective, a plaintiff must offer evidence of (1) a design defect, (2) a manufacturing defect, or (3) a failure to warn. Having withdrawn his failure to warn claim, the only defect that Mr. Land asserts in this case is a design defect. To prove a design defect, a plaintiff may show either (1) that the product’s danger is unknowable and unacceptable to the average or ordinary consumer (the consumer expectations test) or (2) that a reasonable person would conclude that the probability and

seriousness of harm that a product causes outweighs the burden or costs of taking precautions (the risk/utility test). *See Tincher*, 104 A.3d at 389.

1. Consumer expectations test

A “product is not defective if the ordinary consumer would reasonably anticipate and appreciate the dangerous condition of the product and the attendant risk of injury of which the plaintiff complains.” *Id.* at 387 (internal citations omitted). The focus is on whether the product was “unsafe for its intended user.” *Phillips v. Cricket Lighters*, 841 A.2d 1000, 1007 (Pa. 2003). Some courts characterize this test as reflecting the “surprise element of danger” latent in a product’s use. *Tincher*, 104 A.3d at 387. The test is whether the product is “dangerous to an extent beyond that which would be contemplated by the ordinary consumer who purchases it, with the ordinary knowledge common to the community as to its characteristics.” Restatement (Second) Torts § 402A cmt. i. The consumer expectations standard is “applicable in cases where the question of how safely the product should have performed can be answered by the common experience of its users.” *Commonwealth v. Monsanto Co.*, 269 A.3d 623, 657 (Pa. Commw. Ct. 2021) (quote omitted). Mr. Land’s consumer expectations claim fails for two reasons.

First, Mr. Land may not assert a consumer expectations claim for a product like the Unicender. In *Tincher*, the Pennsylvania Supreme Court cautioned that a “product whose danger is vague or outside the ordinary consumer’s contemplation runs the risk of being subject to arbitrary application of the strict liability doctrine.” 104 A.3d at 388. In reaching

its decision, the Pennsylvania Supreme Court relied on the California Supreme Court's decision in *Soule v. Gen. Motors Corp.*, 882 P.2d 298 (Cal. 1994). In that case, the California Supreme Court explained that the "consumer expectation test is reserved for cases in which the *everyday experience* of the product's users permits a conclusion that the product's design violated *minimum* safety assumptions, and is thus defective *regardless of expert opinion about the merits of the design.*" *Id.* at 308 (emphasis in original). Given the Pennsylvania Supreme Court's reliance on *Soule*, judges in this Court have relied on *Soule* as instructive about the scope of the consumer expectations test. *See, e.g., DeJesus v. Knight Indus. & Assoc., Inc.*, No. CV-10-07434, 2016 WL 4702113, at * 8 (E.D. Pa. Sept. 8, 2016).

The Unicender is not a product within the ken of an ordinary consumer. In addition, the defect that Mr. Land posits, which is whether it entails a danger of uncontrolled release after debris strikes it, is not within the "common knowledge" of people "drawn from the community at large." *Lunghi v. Clark Equip. Co.*, 153 Cal. App. 3d 485, 496 (Cal. Ct. App. 1984). Instead, the only way for the jury to understand the latent risk with the product is to hear from Mr. Land and other arborists about how they use the product, how and when debris ordinarily falls during the process of tree cutting, and the types of movements they make while in the air. That goes beyond the understanding of an ordinary consumer to assess whether the dangers go beyond what an intended user would expect.

This outcome is consistent with the way that other cases approach the consumer expectations test. When the risk of a product in a particular setting—even a complex product—is within everyday understanding, then the claim can proceed. *See, e.g., McCabe v. Am. Honda Motor Co.*, 100 Cal. App. 4th 1111, 1125 (2002) (nondeployment of an air bag in a high-speed collision within the understanding of an ordinary consumer); *Knight v. Avco Corp.*, No. 4:21-CV-00702, 2024 WL 3746269, at *34 (M.D. Pa. Aug. 9, 2024) (applying the consumer expectation test to a prematurely sticky exhaust valve on a helicopter engine); *Roamingwood Sewer & Water Ass'n v. Nat'l Diversified Sales, Inc.*, No. 1:20-CV-00640, 2023 WL 2775149, at *8 (M.D. Pa. Apr. 4, 2023) (applying the test to an upgraded sewer valve in a sewer system). But when the risk itself is outside the common understanding of everyday members of the public, then the claim cannot. *See, e.g., Pruitt v. Gen. Motors Corp.*, 72 Cal. App. 4th 1480, 1484 (1999) (deployment of an air bag in a low-speed collision outside the understanding of an ordinary consumer); *DeJesus v. Knight Indus. & Assocs., Inc.*, No. CV 10-07434, 2016 WL 4702113, at *8 (E.D. Pa. Sept. 8, 2016) (consumer expectation test not applicable to a lift table in a factory setting); *Soule*, 882 P.3d at 311 (interplay between a car's frame, suspension, and interior during an accident outside a juror's ordinary experience). The risk of an uncontrolled fall from a device like the Unicender falls into the latter category, so it cannot proceed.

Second, even if Mr. Land could assert a consumer expectations claim, it would fail because he does not have sufficient evidence to proceed. To assess a reasonable

consumer's expectations, I need to consider "the nature of the product, the identity of the user, the product's intended use and intended user, and any express or implied representations by a manufacturer or other seller." *Tincher*, 104 A.3d at 387. The Unicender allows an arborist to ascend or descend a rope when he presses the handle. However, the manual states that it is not designed to catch a fall, which suggests that a reasonable consumer would not expect the device to arrest a fall. Mr. Land presented no evidence that contradicts an ordinary or intended user had a different understanding. Instead, Mr. Land only provides evidence of **his** expectation in purchasing the Unicender, but other than establishing that he's an arborist, he has not established that his expectation about what would happen if debris hit the Unicender is the same as the expectation of an ordinary user, particularly to the extent his expectation conflicts with the warnings in the manual. Without evidence about what ordinary or intended users might expect, I have no basis to conclude that Mr. Land's expectations aligned with those of an ordinary consumer.

In addition, Mr. Land has not offered admissible evidence to suggest that there was a surprise element of danger in the way that he used the Unicender. The only evidence that Mr. Land identifies is an opinion from Dr. Glancey that the Unicender failed when Dr. Glancey applied a dynamic strike while the device held 195 pounds. That opinion is not admissible, however.

As an initial matter, I conclude that Dr. Glancey is qualified to opine about design defects in the Unicender. His mechanical-engineering background and familiarity with product testing show that he possesses specialized knowledge to analyze how a climbing device functions under various loads. Although Rock Exotica challenges his lack of direct experience in arborist climbing products, the Third Circuit applies a liberal standard for expert qualification, emphasizing that “[a] broad range of knowledge, skills, and training qualify an expert.” *Pineda*, 520 F.3d at 244. Therefore, Dr. Glancey meets the threshold to opine on the Unicender’s design and potential alternative designs.

However, Dr. Glancey’s opinion on the existence of a design defect does not fit the facts to this case. Dr. Glancey did not test the Unicender’s ability to hold a load with a double-rope technique, even though it is undisputed that Mr. Land was using that technique when he fell. Yet a double-rope technique effectively halves the load on the rope. (ECF No. 42-18 at 246:17–247:8.) So, while Mr. Land might have weighed 195 pounds at the time of the fall, the effective load on the Unicender was slightly less than 100 pounds. Dr. Glancey did not test anything close to that weight, so the opinions that he offers about the Unicender’s performance while holding 195 pounds in a single-rope technique is not helpful to the jury.²

² Dr. Glancey did not record the exact angle at which he struck the Unicender or record the amount of force that he used. Nor does anyone know the exact angle at which anything might have struck the Unicender or with how much force when Mr. Land fell. Those issues, though, go to the weight, not the admissibility, of Dr. Glancey’s testimony.

2. Risk/utility test

The risk/utility test balances a seller's interests versus a consumer's interests from the perspective of a reasonable seller. *See Tincher*, 104 A.3d at 389. The Pennsylvania Supreme Court has provided seven factors relevant to the analysis:

- The usefulness and desirability of the product—its utility to the public as a whole;
- The safety aspects of the product—the likelihood that it will cause injury, and the probable seriousness of the injury;
- The availability of a substitute product which would meet the same need and not be unsafe;
- The manufacturer's ability to eliminate the unsafe character of the product without impairing its usefulness or making it too expensive to maintain its utility;
- The user's ability to avoid danger by the exercise of care in the use of the product;
- The user's anticipated awareness of the dangers inherent in the product and their availability, because of general public knowledge of the obvious condition of the product, or of the existence of suitable warnings or instructions; and

- The feasibility, on the part of the manufacturer, of spreading the loss by setting the price of the product or carrying liability insurance.

Id. at 389–90. Mr. Land does not offer any evidence as to most of these factors. In fact, the only evidence that he identifies in his summary judgment opposition is Dr. Glancey's opinion positing an alternative design to add safety features to the Unicender. Again, though, that opinion is not admissible.

Dr. Glancey posits an alternative design to put a guard on the Unicender, but he never produced a prototype or sketches of his design, let alone tested it. He did not consider if the proposed guard might make the Unicender more dangerous by increasing the risk that debris could jam the handles or that the guard would prevent visual inspection of the device for wear and tear. Nor did he point to any other product in the relevant market that uses the alternative that he proposes. Instead, his expert opinion that a guard is a feasible and practical design that would make the Unicender safer "is based on nothing more than his training and years of experience as an engineer" and that's not enough. *Oddi*, 234 F.3d at 158. Although engineering experts routinely rely on conceptual alternatives to highlight potential design shortcomings, the lack of support for Dr. Glancey's opinion prevents me from evaluating its reliability and renders his testimony inadmissible. *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 742–46 (3d Cir. 1994).

The Third Circuit's decision in *Oddi* is on point and mandates that I exclude Dr. Glancey's alternative design. In that case, an expert offered an alternative design for an

aspect of an automotive design without tests or force measurements. *Oddi*, 234 F.3d at 147–50. That expert “conducted no tests and failed to attempt to calculate any of the forces on Oddi or the truck,” relied on “little, if any, methodology beyond his own intuition,” and left “nothing ... to submit to peer review.” *Id.* at 156–57. The court explained that absent any standards to guide the expert’s opinions, “no gatekeeper [could] assess the relationship of [his] method to other methods known to be reliable.” *Id.* at 157 (internal quotations omitted). The court also noted that the expert failed to consider the negative consequences of the alternative design and concluded that his “haphazard, intuitive inquiry” failed to satisfy *Daubert*. *Id.* at 156–57.

So too here. Dr. Glancey posited something and then just asks us all to take his word for it that it will work, based on nothing more than his status as an engineering expert. That’s not good enough. Expert testimony about alternative designs requires more than an inventive mind. It requires real science, and Dr. Glancey offers none.

Once I exclude Dr. Glancey’s testimony, Mr. Land has no evidence to support his risk/utility claim. He conducted no analysis of the other factors applicable to the risk/utility test, and in an adversarial system, it’s not my job to do it for him. But it is worth noting that many of those factors cut against his claim. For example, the Unicender provides utility to the public by enabling arborists to climb and trim trees. The risk that a serious injury will result from its failure is high—falls from heights are inherently dangerous—but there’s no evidence of a substitute product that offers the same benefit. There’s no other

evidence, beyond Dr. Glancey's inadmissible testimony, about Rock Exotica's ability to eliminate the risk of a fall. Nor is there evidence about a user's ability to avoid the risks that the Unicender might pose. Nor is there evidence about a manufacturer's ability to spread the risk.

B. Negligence

Under Pennsylvania law, a plaintiff asserting a negligence claim must show (1) a duty that the law recognizes; (2) a failure on the defendant's part to conform to that duty, or a breach of it; (3) a causal connection between the defendant's breach and the resulting injury; and (4) actual loss or damage that the plaintiff suffered. *See Atcovitz v. Gulph Mills Tennis Club, Inc.*, 812 A.2d 1218, 1222 (Pa. 2002). Mr. Land relies, once again, on Dr. Glancey to provide proof of these elements, but he fails at the causation element.

Dr. Glancey opines that Rock Exotica's engineering and testing process was less structured than other manufacturing companies and that it fell short of industry standards for manufacturing activity. He also opines that the Unicender's material was not as hard as some products, which falls short of engineering specifications. All of that might be true, and Dr. Glancey is qualified to offer those opinions. I can also assume (without deciding) that his testimony establishes a duty to manufacture products safely and that Rock Exotica's approach fell short. But there's nothing to tie that failure to the harm that Mr. Land suffered.

The Unicender's hardness did not cause Mr. Land's fall. To the contrary, the record shows no evidence of wear on the Unicender, and Dr. Glancey admits that wear did not contribute to the accident. Similarly, Dr. Glancey does not opine, and no other evidence suggests, that Rock Exotica might have designed or manufactured the Unicender differently if it had employed a different engineering process. At most, Dr. Glancey claims that Rock Exotica might have perceived the danger that the Unicender posed. But that doesn't establish proximate cause of an injury. Instead, it conflates strict liability and negligence concepts. Without some evidence of causation, Mr. Land's negligence claim cannot proceed.

IV. CONCLUSION

Mr. Land hangs his hat on Dr. Glancey's testimony to create factual disputes. But Dr. Glancey's testimony either doesn't fit the facts of the case, is not reliable, or doesn't speak to all the elements of the claim. In short, it doesn't save any of his claims. I will therefore grant in part Rock Exotica's motion to preclude Dr. Glancey's testimony and grant in full Rock Exotica's summary judgment motion. An appropriate Order follows.

BY THE COURT:

/s/ Joshua D. Wolson

JOSHUA D. WOLSON, J.

April 16, 2025